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ABSTRACT

Encouraged by the Federal government, institutions of higher education have entered into agreements with the government to perform basic research in the national interest that also conforms to institutional objectives. For a number of leading institutions, the research mission has become a major function alongside instruction and has provided a valuable adjunct to graduate education. A large part of the expansion required for federal research has been supported by reimbursements from the government. However, the government has not reimbursed universities for the full cost of federal programs and the institutions have had to use funds from instruction and other programs to cover the shortfall. Major research universities are unable to solve the problem by curtailing government research without severe restructuring of the institutions and changing their role in the affairs of the nation. Therefore, they seek equitable treatment by the government. In spite of this need, there are now new pressures in the government that would have the institutions bear an even larger share of the cost of federal programs. (Author)

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Cost of Federal Research Performed by Universities: A Call for Equity

by Max A. Binkley

The commitment of the federal government to research has produced rapid developments in science and technology. The research effort supports the health and welfare of the people of the United States, the national defense and the economy.

Contributing to this advancement has been research performed by the universities of the nation. Encouraged by the federal government, institutions of higher education have entered into agreements with the government to perform basic research which is in the national interest and which conforms with institutional objectives. For a number of leading institutions of higher education, the research mission has become a major function alongside instruction and has provided a valuable adjunct to graduate education.

Commensurate with the effective performance of both research and instruction, the universities have augmented their faculties, their support staffs and their facilities. A large part of the expansion required for federal research has been supported by reimbursements from the government. However, the government has not reimbursed universities for the full cost of federal programs and the institutions have had to use funds from instruction and other programs to cover the shortfall.

Government policy in regard to research performed by universities has imposed cost sharing requirements and arbitrary restrictions on the reimbursement of indirect costs. The resultant use of other institutional funds for government programs has contributed to the financial straits in which the universities find themselves and from which they seek to recover.

Major research universities are unable to solve the problem by curtailing government research without severe restructuring of the institutions and changing their role in the affairs of the nation. Therefore, they seek equitable treatment by the government. In spite of this need, there are now new pressures in the government which would have the institutions bear an even larger share of the cost of federal programs.

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Function of Cost Reimbursement

Expressed in its simplest terms, the function of cost reimbursement is as follows: Costs are incurred when services are performed. For an operation to survive, the costs incurred must be fully covered by revenues or reimbursements. This is true whether the costs are directly identified with an activity as direct costs, or the costs are indirectly related to the activity.

Shortfall Borne by Universities

Two principal factors lead to the shortfall of federal cost reimbursement borne by universities:

1. Although applicable indirect costs are audited and negotiated under government cost principles established by Federal Management Circular (FMC) 73-8 (A-21) which, in general, but not completely, are designed for reimbursement of full cost, the principles in practice are often subverted by arbitrary limitations imposed by law or agency practice.

2. The government imposes requirements on the institutions to share in the costs of many federal programs. Such mandatory cost sharing, imposed on an institution without choice when it enters into a federal agreement, is distinguished from voluntary cost sharing which an institution may choose to bear in recognition of its corollary interest in a program and the benefit it expects to derive. Voluntary cost sharing is a practice strongly encouraged by agencies of the federal government.

In this writing, the term "shortfall" refers to arbitrary limitations on indirect cost recovery and mandatory cost sharing requirements, but excludes voluntary cost sharing.

Full Costs are Paid for Services by Other Organizations

While the role of institutions of higher education may be unique, it is noted that the federal government recognizes the principle of full cost reimbursement for research performed by other organizations. Commercial firms and not-for-profit organizations receive full payment for direct and indirect costs, and in addition commonly receive a fee. Rarely are such organizations required to share costs, except when the results are likely to lead to a long-term monetary benefit to the performing organizations.

In the case of universities, the historical relationship with the government was considered to be that of a partnership, emphasizing a mutuality of interest directed at the public good. As government policies and practices became more restrictive, the partnership concept somewhat faded, evolving in the direction of a vendor-purchaser relationship. A number of individuals in higher education desire a restoration of the partnership relationship, believing that the appropriate role of universities is unlike that of other performing organizations.

Under any concept of the relationship between universities and the government, however, the federal government chooses those projects it will support based on the expectation of obtaining value in the national interest, just as it does in entering into agreements with commercial firms and not-for-profit organizations.

Misgivings About Paying Full Cost to Universities

For one reason or another, uncertainties have surrounded the appropriateness of paying full cost to universities, especially in regard to paying full indirect costs. Opinions are expressed that the institutions should not be reimbursed for indirect costs because they would have to incur such costs anyway, or that indirect costs are not real costs. The claim is made that full cost should not be paid by the government because the institutions derive benefits from federal projects. Why such assertions are not made about payments to commercial firms and other organizations is unclear.

Higher education organizations and institutions have given lucid explanations of the validity of and need for full cost reimbursements, but these have yielded only limited results.

Severity of the Consequences

To those concerned about the welfare of academic institutions, misgiving about the appropriateness of full cost reimbursement is cause for apprehension because it leads to potentially severe consequences. Prodded by the Congress to better control indirect costs, the Department of Health, Education, and Welfare in 1975 proposed changes in cost principles which would cause the institutions to bear an additional $250 million to $300 million a year of the cost of federal programs.

In January 1977 DHEW revised its proposal to be less severe. Preliminary analysis of that proposal indicated the institutions would have to bear additional costs of $190 million to $225 million per year. Implementation of the DHEW proposal would result in serious damage to higher education and severe detriment to the scientific research base of the nation.

The Plight of Higher Education

The threat of additional damage continues to imperil the already precarious financial condition of the institutions. As costs have increased, tuition rates have been raised to the point of being prohibitive. State legislatures are funneling relatively more funds into social programs and relatively less into education. Income from endowments and contributions has not kept pace. Universities have been examining costs and programs, effecting retrenchments where possible, reallocating available resources and endeavoring to make necessary adjustments without serious impairment to the accomplishment of their missions.

The present fiscal distress of universities is in part caused by the failure of the federal government over the years to pay the full costs of the research and educational services performed under government agreements. When proposals are made to worsen the situation, the institutions naturally rise in protest. No one offers an answer to the inevitable question: Where are the funds to come from if the government covers even less of its share?

Magnitude of Costs Absorbed by Universities

The total shortfall, caused by arbitrary limitations set by federal statutes and practices related to reimbursements of indirect costs and by requirements for mandatory cost sharing, is actually unknown. A rough approximation, based on data collected from seven leading research universities where under-reimbursement averages 10 percent, indicates that institutions participating in federal programs contribute around $250 million per year to the costs of the programs.

One public university experienced a shortfall of $2 million last year. That institution has found it increasingly difficult to justify to its state legislature the use of in-

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structional funds for federal research. Likewise it has been difficult for the institution to provide a satisfactory explanation to its undergraduate students, whose tuition is set by a formula based on instructional costs which include the costs absorbed for federal research programs.

The true federal costs borne by universities are even greater than indicated above. The shortfall in indirect cost used in the above figures consists only of the uncovered portion of the amounts otherwise allowable under rates approved by government auditors and negotiators under FMC 73-8. In addition the established principles disallow certain costs. Interest cost is disallowed even though there may be no way an institution can perform a federal research project other than by acquiring facilities, such as a computer, through credit arrangements. Among other costs specifically disallowed are those incurred for fund raising and public relations associated with research.

However the most significant shortfall in cost reimbursement is attributable to cost sharing requirements and to failure to allow the full indirect cost rate established under FMC 73-8.

Substance of Indirect Cost

Unlike *direct* costs, the very principle of reimbursing *indirect* costs of universities has been controversial in the minds of some federal officials. Consequently, the nature of *indirect* cost and the issues involved warrant special attention.

Distinction Between Direct and Indirect Costs

Indirect costs are not as different from direct costs as may be thought. Both direct and indirect categories represent genuine costs requiring the expenditure of resources. There is nothing hypothetical or fictitious about indirect costs.

Basically there is only a single distinction between the two categories: the degree to which the costs can be specifically identified with a given activity. As an example, the cost of clerical effort in compiling scientific data for a research project is clearly a direct cost of carrying out that project. On the other hand, clerical effort expended in the payroll department is a cost of administering the payroll of the entire institution. Hence a portion of the cost of the payroll effort is an indirect cost of the research project, necessary for processing payments of the researchers' salaries. One type of cost is related directly to the research project; the other is related indirectly. Because indirect costs cannot be directly assigned to the benefitting activities without prohibitive administrative effort, they are allocated on carefully chosen bases which reasonably approximate the pertinent relationship. From the standpoint of accounting principles, the allocation process is a proper substitute for direct identification.

Direct and Indirect Costs of Universities

Typical *direct* costs of research performed by universities are salaries in proportion to the direct effort applied, materials and supplies used and specialized equipment as needed and authorized.

The following types of costs are categorized as *indirect* costs:

General administration

University-wide administrative activity such as accounting, purchasing, personnel, and so forth.

Departmental administration

Departmental administrative activity of deans, academic department heads, faculty, support staff, and so forth.

Sponsored projects administration

University-wide administrative activity devoted to contracts and grants.

Physical plant operation and maintenance

Custodial services, utility expenses, maintenance, protection of plant, and so forth.

Library

Depreciation or use allowance on facility costs

In all cases federal projects are only allocated a *proportionate* share of the indirect costs. General adminis-

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tration expense, for example, is allocated between federal programs and nonfederal activity in the ratio of the total direct costs of each. Costs which are identified exclusively with nonfederal activity are assigned only to that activity.

The foregoing explanation is a highly condensed summary of FMC 73-8, the federal cost principles which are rigorously applied by the government in establishing indirect cost rates of institutions. In effect, an established rate is the maximum rate that may be claimed, while in practice many federal agreements, either by statute or agency practice, limit reimbursement of indirect cost to rates far short of an established rate.

Disparagement of Indirect Cost

Whatever the organization, indirect costs seem to give rise to complaints. Even in industry, with its long history of cost analysis, instances still occur when divisional or product managers plead that it is unfair to burden their products with a share of corporate indirect cost. To that they are told in no uncertain terms that products are losers if they fail to sell at prices adequate to cover *all* costs plus a reasonable profit.

The negative tone of some of the nomenclature used has contributed to the problem. The term "burden," now hopefuily obsolete, carried a built-in negative connotation. The term "overhead" was an improvement but still had a shadow of obscurity. The term "indirect cost" is certainly more precise.

Universities have become aware that much of the stigma associated with indirect cost comes from inside the institutions: faculty members do not welcome a charge for indirect cost against their research projects. Faculty members are often not in a position to recognize fully the magnitude of the essential functions which incur indirect costs, such as the prevailing rates paid trades craftsmen, the amount of energy consumed and its cost, and so forth. The fact that faculty researchers control direct costs themselves but are assessed indirect costs puts the latter in a different light. Some faculty members tend to take for granted services such as heating and other space-related functions, accounting, personnel administration, and so forth, and believe such services should be charged to a source of funds other than their research projects.

At times faculty members have disparaged indirect costs in comments with government officials. The institutions in turn have attempted to develop internally a better comprehension of the nature and role of indirect costs, so that faculty members may understand that indirect costs are necessary costs and must be paid for.

Average or Incremental Indirect Cost

Following generally accepted accounting principles, FMC 73-8 for the most part provides for allocation of indirect costs on a proportionate or average basis. Some sources dispute the equity of averages and would have the government reimburse only incremental costs — only the additional costs caused by federal programs. In the operation of institutions which are not static, there is no realistic way to approximate what the costs would be in the absence of federal research activity. Apart from that difficulty, the concept comes up short when applied to a whole operation. Raymond J. Woodrow of Princeton University uses an example of telephone switchboards at an institution:

> Only one space is left on one switchboard, which Project A comes along and uses. Project B comes in and needs a new telephone, but this means a whole new switchboard, telephone operator and perhaps even building addition. Should Project A pay nothing for telephone service and Project B pay for the entire new switchboard and associated costs? The answer is clearly no. Average costs, not incremental costs, are generally the most equitable answer.[1]

A Bargain for the Government

In practice, institutions have typically been satisfied with the use of averages in settling indirect cost rates with federal auditors and negotiators, even though the use of averages generally works to the advantage of the government.

Actual support costs for federal research are often proportionately greater than required for the instructional function and other functions of universities. Although general administrative expense is allocated between federal programs and nonfederal programs in the ratio of the total direct costs of each, a more precise allocation would likely result in the assignment of greater costs to the government, because relatively greater effort is required to meet federal requirements for accounting and reporting, for compliance with agreements, and so forth. While the cost of utilities is allocated on square footage devoted to research and nonresearch activities, the actual consumption of utilities per square foot by research laboratories far exceeds the consumption rate of most classroom space because research facilities are high consumers of power, gas, etc. Recent significant increases in utility rates have compounded this factor. Similar situations exist in other elements of indirect cost.

More precise measurements would be prohibitively expensive, but the favorable position of the government in this respect should not be lost sight of.

Variations in Rates of Institutions

Indirect cost rates differ from institution to institution for valid reasons. True differences in actual aggregate costs only partly explain the variations.

Rates vary because of differences in the base used for application of the rates. Some institutions use a base of

[1] Raymond J. Woodrow, *Indirect Costs in Universities*, Special Report of the American Council on Education, March 1976. Also published as NACUBO Administrative Service Supplement 4:5:1.

salaries and wages, others use salaries and wages plus staff benefits, and others use modified total direct costs.

Variations are also attributable to differences in the classification of direct costs vs. indirect costs — variations which are associated with the diverse characteristics of the institutions themselves. Universities vary in nature, organizational structure and physical features; in the extent of centralization or decentralization; and in the philosophy of how services should be delivered. Each has adopted a style of management and operation construed to best fit its needs.

Costing systems must fit the characteristics of the institution, so they too differ from university to university. In one institution reproduction service may be an indirect cost; in another institution each job may be priced out as a direct cost of the activity using the service. Ine one institution the cost of basic telephone service may be treated as a direct charge; in another institution it may be an indirect cost similar to other utilities. Such differences are legitimate and necessary, paralleling differences in the management control systems of the institutions.

A valid comparison of the indirect cost rates of different institutions can only be made with knowledge of the differences existing in the elements and bases of the rates. As a matter of principle, a comparison of total costs tends to be more reliable than a comparison of indirect cost rates, However, comparison of total costs is of limited utility when evaluating research projects because of the uniqueness of most individual projects.

Variation in the indirect cost rates from one university to another has brought pressure from the government for more uniformity in the costing process. While *some* additional degree of uniformity may be attainable, complete standardization cannot be reached. Institutions will continue to have differences that are reflected in indirect cost rates. A 1969 report of the General Accounting Office said:

> It is not feasible to determine indirect costs by a fixed method or procedure applied uniformly under all conditions.[2]

Relative Increase in Indirect Costs

The fact that indirect costs have increased at a more rapid rate than direct costs in the past few years has led to apprehension in government circles. Indeed the relative increase has also been of great concern to university administrators and faculty members, for it has eroded program funds for both instruction and research.

In March 1976 Charles V. Kidd, executive secretary of the Association of American Universities, furnished the House Committee on Appropriations an explanation of the reasons indirect costs had increased faster than direct costs.[3] He reported that the substantial costs incurred by universities in carrying out social programs mandated by the federal government have principally affected indirect costs rather than direct costs. He pointed to affirmative action and equal pay programs, the Occupational Safety and Health Act, provisions regarding age discrimination, environmental protection programs, safeguards placed on experimentation with radioactive materials, and programs for the protection of human subjects and animals.

Kidd showed that faculty compensation, which principally affects direct cost, rose 52 percent from 1968 to 1975, while nonpersonnel costs, which principally affect indirect costs, rose 88 percent during the same period. One nonpersonnel cost — the cost of utilities including particularly the cost of fuel — skyrocketed during the period. Almost without exception the cost of fuel is included in indirect cost. Physical plant costs, which include the cost of fuel and other utilities, increased 122 percent.

Another factor contributing to higher indirect costs has been the additional administrative costs incurred by universities in response to the increasingly restrictive requirements imposed by the government for documentation of charges to federal contracts and grants. As the government has demanded more precision in accounting it has been necessary for universities to allocate more resources to administration, thereby raising indirect costs.

The cost increases described above have primarily affected indirect costs and have been imposed by forces outside the control of the institutions.The institutions have been put in the position of having to defend to the government cost increases that to a considerable extent have been forced on them by the government itself.

In disregard of the role of the government in causing the cost increases, some federal sources have threatened to curtail reimbursements of what they perceive as runaway costs. It would appear that, while the government can compel an institution to carry out an expensive new social program, the government may be unwilling to bear the resultant increase in the cost of federal research.

Alleged Waste and Inefficiency

The cynicism with which indirect costs are viewed in some quarters surfaces again when assertions of waste and inefficiency are directed at the rise in the costs.

Indirect cost rates are falsely considered to be measures of efficiency by some individuals. This concept has been refuted repeatedly, but still recurs. The 1969 GAO report stated the point clearly:

> These rates do not measure, and should not be used to evaluate, the relative efficiency of research efforts. Rather, the overhead rates are used solely to determine the in-

[2] GAO Report B-117219, *Study of Indirect Cost of Federally Sponsored Research Primarily by Educational Institutions*, June 12, 1969.

[3] Charles V. Kidd, *Why Are Indirect Cost Rates for Federal Research Grants and Contracts with Universities Increasing?* A Report to the House Committee on Appropriations, Association of American Universities, March 16, 1976.

> direct portion of the total cost of research; and they will vary in view of the differing nature of research, the variety of organizational structures and operations, and the different types of research facilities involved.

In contrast to the conclusions of GAO, the Survey and Investigations Staff of the House Committee on Appropriations viewed increases in indirect cost rates as evidence of inefficiency and waste. A report of the investigations staff asserted that:

> There is no pressing incentive for a grantee to reduce overhead costs under the present system of establishing indirect cost rates. On the contrary, the system may encourage inefficiency, as the federal government will pay a share of the indirect costs of the grantee.[4]

This assertion is unfounded — the system does *not* work to encourage inefficiency. Only a fraction of the indirect cost incurred by universities is reimbursed by the federal government. Last year at one university, believed to be typical, the federal government reimbursed only 17 percent of the total indirect cost incurred in connection with all functions throughout the institution. For every dollar of indirect cost, 83 cents had to be paid by funds obtained from other sources.

As pressed as institutions have been to maintain their educational programs in the face of higher prices and limited revenues, they have been highly motivated to effect economies wherever possible. Universities have been conducting self-examinations leading to adjustments in operations. They know very well that every increase in indirect cost is only reimbursed in part by the federal government and that the remainder must be funded by other sources.

A proposal has been made for an incentive system whereby an institution would be rewarded for reduction in the indirect cost rate by being permitted to retain a portion of the savings, and would be penalized for an increase in the rate by being assessed a portion of the government's share of the increase. This proposal ignores the existing inducements to economize that were explained above. It would encourage institutions to convert some indirect costs into direct costs, which could only be done by incurring additional administrative costs, thereby boosting total costs. Penalizing an institution for incurring higher indirect costs imposed on it by governmental requirements would be grossly inequitable. It would undermine an institution's motivation to comply with important federally mandated social programs, such as affirmative action and OSHA.

Proposal for Competitive Cost Bidding

The Conference Committee of the Senate and House Committees on Appropriation in its report on August 3, 1976, urged that consideration be given to interjecting a system of cost competition in the grant approval process. This proposal arose from Congressional concern about the increase in indirect costs, but the record contained no indication of whether the competition contemplated would be based on indirect cost rates or on total costs. Competition based on indirect cost rates would be fraught with numerous weaknesses, as outlined earlier in this writing and as implied in the 1969 GAO report, because indirect cost rates are not comparable among institutions for valid reasons. Awards based on indirect cost rates would lend encouragement to classifying costs as direct instead of indirect, thereby adding to the cost of administration and to total cost.

Competition based on total cost would escape some of the pitfalls inherent in comparing indirect cost rates. However, the government should proceed carefully in deliberation of any method of primarily awarding research agreements based on lowest cost. A premise that the government receives more value dollar-for-dollar from a low-cost research project than it does from a high-cost project is not always valid, for the quality of research results is directly related to the competency of the researchers and the support they receive.

The purpose of research is to expand the limits of knowledge and to apply the results to the benefit of the nation. It is the expectation of the accomplishment of this objective that should be related to the cost. The most productive scientist may be the one who has a distinguished record of achievements and years of experience. He or she is paid a commensurate salary and may need sophisticated equipment (which uses large quantities of expensive power) and may require considerable support services. In contrast, a less competent scientist (at perhaps a lower salary), or a scientist with inadequate facilities or support, cannot be expected to be so productive. The prospect for valuable results is much greater with the first scientist than with the second.

While the nation awaits scientific breakthroughs in numerous areas of research, it would be a serious mistake to allow cost competition to downgrade the award process from the present system of competition primarily based on technical merit. Any further attention to this concept should include thorough evaluation of the potential results by the scientific community.

Recent History

The following is a review of developments in recent years relating to cost reimbursements.

1969 GAO Report on Indirect Cost

In its report on indirect cost, the General Accounting Office in 1969 observed that the determination of indirect cost must be tailored to the individual circumstances of the institutions, and hence cannot be made uniform. It pointed out that:

[4] *Overhead Reimbursement to Grantees and Contractors — Department of Health, Education, and Welfare*, dated March 1975, released February 12, 1976.

> The same kinds of cost are properly treated as direct costs in some circumstances and as indirect costs in others. . . . However, the total cost should not be affected by the fact that a cost element is charged directly or indirectly.

GAO did not believe that a statutory limit on indirect cost would permit a realistic reimbursement of indirect cost based on sound accounting principles. It said that a limitation could cause institutions to take steps to identify more costs as direct, which could result in greater overall cost of operations and greater expense to the government. GAO also explained that:

> The wide variations which exist in overhead rates do not indicate that an institution with a higher rate is less efficient than one with a lower rate or that the total cost of research is greater. Further, high rates do not mean that the government is paying profit, fees, or subsidy to the institutions.

1969 PMM Report on Indirect Cost

Also in 1969, the public accounting firm of Peat, Marwick, Mitchell & Co. (PMM), in a report commissioned by the American Council on Education,[5] concluded, as did GAO, that there was a limitation to the degree to which indirect cost rates could be determined uniformly; that provision must always be made for fundamental differences among universities which, in turn, will continue to cause different rates to be computed.

Expressing another concept consistent with the GAO report, PMM said that an indirect cost rate cannot be used as a measure of the relative cost to support research. It found that categorizing more costs as direct costs instead of indirect costs led to a higher reimbursements of total costs.

Observing that the initial concern which gave rise to the study was the possibility that universities might be profiting unfairly from federally funded research projects, PMM reported that its findings indicated exactly the opposite. It explained that:

> Because of the cost allocation principles which are applied uniquely to educational institutions, the universities are not recovering costs which are important to their ability to sustain a desirable research capability.

The Intervening Years

Despite the perspectives offered by the GAO and PMM reports, some sources, including those in Congress, have continued to express doubts about the reasonableness of reimbursing indirect costs. The institutions have persistently appealed for an equitable policy of reimbursement.

A number of developments in the last few years have gradually changed the nature of the fiscal relationship between the government and the institutions. In many aspects of public and commercial activity, enhanced standards of accountability became the order of the day. That development, combined with pressures to reduce federal expenditures, led federal auditors and negotiators to place increasingly rigid interpretations on the regulations and to insist on higher standards of accounting, reporting and supporting documentation on the part of universities. The ability to respond promptly varied from institution to institution. Some of them had not put great emphasis on accounting and administrative procedures because they had placed high priority on other needs in their operations.

The degree of criticism contained in federal audit reports grew much more severe. At times federal officials attempted to apply policies which went beyond the requirements of FMC 73-8, or to apply increased standards of accountability retroactively. These attempts were resisted by the institutions. In a number of instances, disallowances by federal officials, although small in relation to the total programs, imposed additional fiscal burdens on the institutions.

Convinced that audit criticism was rooted both in more rigid requirements imposed by federal auditors and in substandard practices at some institutions, the organizations representing higher education moved to correct the latter condition. In the early months of 1976, officials of higher education organizations advised presidents and chancellors to take a personal interest in the costing practices of their institutions and to assure that prompt steps were taken as needed to improve them. Audit information has been exchanged monthly among major universities since September 1974. Programs in the financial management of contracts and grants have been presented for both top level academic and financial officials, in recognition that the commitment of each sector is necessary for effective results. Other national programs have been offered to enhance institutional competence in determining indirect cost rates.

The institutions have become concerned that the insistence of federal officials on more precision in costing has diverted resources from programs to administration, thereby increasing indirect cost.

Meanwhile individuals in the government have become uneasy about the relative growth of indirect costs. As noted earlier, the cause of the increase is due in part to factors outside the institutions, including programs mandated by the federal government itself. The higher level of precision and documentation now required by federal auditors adds to the level of indirect costs. Moreover, the institutions are caught in a squeeze between cost increases brought on by inflation and other factors, and less than adequate increases in revenue. Hence they have been motivated to pursue more vigorously their legitimate claims for adequate recovery of indirect costs.

1975 Congressional Investigations Staff Report

In March 1975 a report on indirect cost by the Surveys and Investigations Staff of the House Committee on Appropriations became available to members of that Com-

[5] *Variations in Research Indirect Cost Rates — A Study of Six Universities*, February 14, 1969.

mittee, although it was not publicly released until February 1976. The Committee had instructed the staff to determine how effectively DHEW had negotiated indirect cost rates, to review the efforts of DHEW to control the expansion of indirect costs, and to recommend means of preventing indirect cost payments from increasing beyond the estimated 1974 level of 25 percent of funds appropriated for contracts and grants.

The resultant staff report was prepared apparently without contact with any university. The report criticized DHEW for failing to control the increase in indirect costs. It gave no recognition to the fact that the growth in indirect cost was in part the result of federally mandated social programs affecting higher education. The investigations staff was convinced that grantees were not motivated toward efficiency and frugality, but did not provide evidence to support the contention.

While the report stated without qualification that indirect costs are real costs and acknowledged that grantees made contributions to the projects when they were not reimbursed for full indirect costs, it added that benefits from federal research accrue to universities in prestige, quality of instruction and attraction of qualified faculty members. The report failed to recognize the duplication of payments for side benefits when universities are subject to both cost sharing and shortfalls in the recovery of indirect cost.

1975 and 1977 DHEW Proposals to Change Cost Principles

Presumably motivated by the Congressional investigations staff report and growing concern in the Congress about indirect costs, DHEW in September 1975 proposed major changes in the cost principles contained in FMC 73-8. The proposed changes would severely curtail reimbursements of indirect costs to universities. The proposal would force the institutions to absorb from their own scarce resources a much larger share of the cost of federal programs. It would reduce federal expenditures without reducing federal programs. There is no evidence of the government giving any consideration to moderation of its own actions which cause costs to rise. In fact, the proposed changes to FMC 73-8 would further add to the costs of operating the institutions, diverting even greater resources from programs to administrative processes.

Analyses made by eight major research universities showed that the effect on them would be an average reduction of 40 percent in the recovery of indirect cost from the federal government. By extrapolation, for higher education as a whole, an additional $250 million to $300 million a year of the costs of federal programs would be imposed on the institutions, further eroding funds for instructional and other programs. As might be expected, the higher education community protested vehemently against the proposal.

In January 1977 DHEW released a revised proposal. Preliminary analysis at three universities indicated the revised proposal would reduce indirect cost reimbursement by an average of 30 percent. By extrapolation, cost recovery by higher education as a whole would be decreased by $190 million to $225 million per year.

1976 Proposal of Universities

Following receipt of the 1975 DHEW proposal, representatives of higher education developed a parallel proposal for revision of FMC 73-8. The document, prepared by the NACUBO Committee on Governmental Relations, was submitted to the Office of Management and Budget and to DHEW on August 4, 1976.

It included a number of provisions sought by DHEW as well as certain provisions requested by the institutions. The committee believed its proposal to be based on sound cost principles. It viewed some parts of the DHEW proposal as departures from cost principles, substituting limits of allowable costs instead.

1976 Statements of the Congress

The Congress gave renewed attention to indirect costs of universities in deliberations on 1977 appropriations for DHEW. On June 2, 1976 the report of the House Committee on Appropriations reiterated concern about the relative growth in indirect costs and urged DHEW to devote greater attention to assuring that the costs are strictly associated with federal grants and contracts. The Committee stated its firm objective that appropriations be devoted to direct research efforts to the maximum degree feasible. It asked DHEW to explore the possibility of including cost competition in the grant approval process. The report of the Senate committee did not discuss the subject of indirect cost.

The Conference Committee report on August 3, 1976 was considerably more compulsive in tone. It spoke of funds being "diverted" to pay overhead costs and stated that:

> It is thus imperative that the Department work closely with the Office of Management and Budget and other federal agencies, to undertake revisions in the indirect cost mechanism which will result in a significant reduction in funds being diverted into indirect costs.

The Conference report was discussed on the floor of the Senate on August 25, 1976. Senator Mathias, concerned about the wording, referred to the provisions of the earlier House report as "a workmanlike, equitable, and wholly acceptable approach." He added:

> We do not want universities to make a profit on federal research and we do not want them to take a loss. We want prudent and economical administration. We should not prejudge the outcome of these technical discussions by deciding what the true costs of research are before the professional judgments are made. What we need is an approach that is fair to the government and to the

> universities. This is the principle that should guide HEW in preparing the material called for in the conference report.

Senator Bayh responded that the statement of Senator Mathias was consistent with the intent of the Conference Committee.

The Situation Today

The Office of Management and Budget has the responsibility for considering the proposals for changes to the cost principles as developed by DHEW and by higher education, and for developing its own proposal for review by the agencies and institutions. It is expected that the new Congress will give renewed attention to the subject of cost reimbursement to universities.

Position of Higher Education

The concluding portion of this paper is a description of the author's concept of what should be the position of the higher education community on cost reimbursement. It is this:

1. Equity calls for reimbursement of direct and indirect costs on the basis of sound cost principles without arbitrary limitations.
2. Equity calls for discontinuation of arbitrary requirements regarding the extent of cost sharing by universities.
3. Cost sharing by an institution — commensurate with its interest in a project or activity, the benefit to be derived by it and its capacity to contribute — should be voluntary and outside the terms of agreement.

A realignment of federal policy based on these principles would lead to an environment in which the government pays full costs, and would reduce the erosion of institutional resources diverted from instruction and other activities to federal programs. Implementation of these principles would fulfill the objectives stated by Senator Mathias:

> We do not want universities to make a profit on federal research and we do not want them to take a loss.

Not all members of the higher education community are in full agreement with the principles given above. Some conceive that because there are educational benefits derived from performing government research, the institutions should absorb part of the costs from other institutional funds. Some faculty members who are principal investigators on federal projects understandably would prefer more funds to be available for the direct costs, which they control, of their research projects. Also they may not appreciate the effect that a shortfall in full cost reimbursement has on the overall financial condition of institutions. Universities are endeavoring to bring about a better understanding by the faculty of the role of full cost recovery.

Higher education is committed to continue its efforts to assure that acceptable standards of accountability are practiced by the institutions. At the same time the government is urged to exercise restraint so that standards are limited to those that are necessary, reasonable and practical, and do not impose unwarranted costs on the operations of the institutions.

In order for higher education to fulfill the institutional goals of quality research in harmony with instructional programs, and in order to assure the financial stability of the institutions on which the nation depends for part of its research effort, it is vital that the government carry out an equitable policy of full reimbursement of the direct and indirect costs of federal programs.

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